

RFID



Pro-Found Real Time Location Systems Who? What? Where? On WiFi Networks

CoreRFID's approach is the ideal solution for active tag applications

Being able to find critical assets can be a matter of life and death; more likely it simply saves costs. Wouldn't it be better if things could tell you where they were? Now it is possible.

A new generation of RFID technology is opening up new opportunities for tracking and tracing assets and staff. Intelligent tags can determine where they are and can announce their location across existing WiFi networks. Attach the tags to essential equipment and it can be found when it is needed. And the same technology can be used to locate essential staff.

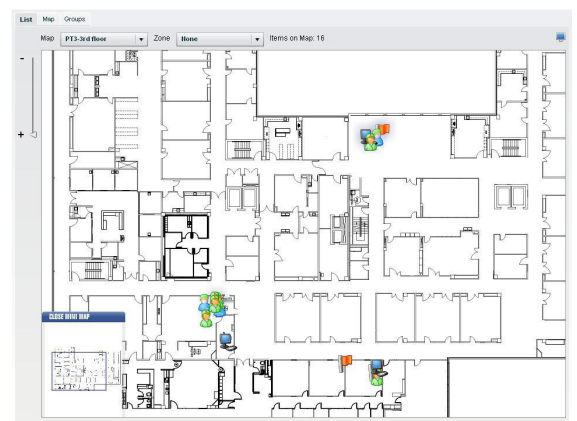
CoreRFID's Pro-Found solution provides long range, real time, interactive tracking using existing WiFi networks to save time, reduce equipment and supply costs.

Real Time Asset Location & Management

Some assets have to be located quickly, exactly. Where is that essential tool right now? Where is the nearest test trolley to where I am? Where is that pallet of components? Where is the nearest qualified first aider to the accident site? These questions need the ability to be able to track people or things in real time, locating them exactly within a building or across a site.

Intelligent tags (tags that can broadcast their presence independently of any reading device) make such real time location of assets possible. By attaching active tags to the assets, and adding tag monitoring devices to an existing wifi network it becomes possible to triangulate the position of any tag in relation to the network. Intelligent tags feature additional capabilities that allow more information to be provided.

Data about tag locations can be shown on a map or used to provide lists of assets, their location and status. Data can also be used to highlight if an item (or an individual) moves out of a area where it supposed to remain, preventing critical documents or devices from leaving a site, for example.



A 2 dimensional map displays the location of critical staff and assets in real time.

Real time asset location provides immediate information on the whereabouts of critical equipment or staff so improving the utilisation of expensive resources.

CoreRFID's Pro-Found Solution

The CoreRFID Pro-Found real time location system (RTLS) for assets uses compact intelligent active tags, easily implemented software and standard networking components in a solution that can be deployed across existing wireless networks.

CoreRFID uses the Ekahau range of technologies for the Pro-Found RTLS for asset management. The Ekahau technology combines a two way communication capability between tags and the systems with the ability to be deployed over standard WiFi networks without expensive additional infrastructure. It even provides an additional business case for WiFi networks alongside VOIP use, for example. It is a robust application platform that allows the rapid creation of solutions for users and can be easily integrated with other IT systems.

Tags can be found anywhere within 150 metres of a reading station in an out-of-doors location or 60 metres within a building. The system can locate a tag with an accuracy of between 3 to 5 metres. Different styles of tag are available for fixing to assets and as employee badges. Asset tags feature two buttons, a buzzer and two leds. The buzzer and leds provide an audible and visual identification of the asset. The buzzer and led can be remotely activated across the network. Programmable buttons on the tags can indicate the change of status of an asset. Motion detection and temperatures sensors can also transmit their status. Staff tags can have a short message display and an emergency pull feature to trigger an emergency alarm.

The Pro-Found system uses a standard IEEE802.11b wireless network between the tags and the network receivers. Data between tags and the network system is transmitted using WEP 40/104 bit security.



T301A

The Pro-Found asset tag can be used across a standard wifi network.

Tags are powered by easily replaceable/cheaply obtained hearing-aid style lithium batteries. Battery life varies depending on the frequency with which the tag announces its location to the network. Tags equipped with a motion sensor only broadcast when their location is changed. The RTLS system monitors the status of tags including battery levels, allowing for batteries to be replaced or recharged.

Pro-Found can also track laptops and other computers using a software "tag" client. This can report the location of a laptop, desktop, mobile phone or PDA can report its location to the Pro-Found system providing immediate location information and better tracking of high value mobile assets without additional tagging hardware.

Pro-Found software runs on standard Microsoft Windows Platforms. The location of tags and their associated assets is determined by the Location Engine. The location of tags and the management of tag information such as alerts, button presses and battery warnings can be managed from a PC running the Vision software.

The Benefits

Pro-Found provides live information on assets. Key benefits are:

- Immediately visible asset location
- Reduces mislaid assets
- Saves time hunting for essential equipment
- Better availability means fewer expensive tools needed.
- Critical staff can be immediately located.
- Two way system – can be used to pass messages to tags.

About CoreRFID

CoreRFID specialise in the technologies that help track, trace, audit and control; to learn more, contact us today:

CoreRFID Ltd. Dallam Court, Dallam Lane, Warrington U.K. WA2 7LT

T: +44 (0) 845 071 0985 F: +44 (0) 845 071 0989 W: www.corerfid.com E: info@corerfid.com

